QUALITY CONTROL REPORTS FOR

GRANUALAR SUB BASE (GSB)

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BM/Bitumen/2014-15 14.07.2014

GRADATION DETERMINATION OF BITUMINOUS MACADAM MIX

As per IS2386 and IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
AGENCY	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
SAMPLE I/D	Medarahalli Main Road Ward No.12, BBMP, Bangalore.
DATE OF TESTING	14.07.2014

GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-04 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
26.5	0	0	0	100	100
19	33.25	6.90	6.90	93.10	90-100
13.2	83.25	17.27	24.17	75.83	56-88
4.75	260.5	54.05	78.22	21.78	16-36
2.36	45.32	9.40	87.62	12.38	4-19
0.3	16.32	3.39	91.00	9.00	2-10
0.075	7.85	1.63	92.63	7.37	0-8

Þ The results indicated above are based on the tests carried	Trail 2				Specified Limits as per MORTH specification table 500-04 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
26.5	0	0	0	100	100
19	36.25	7.52	7.52	92.48	90-100
13.2	82.25	17.06	24.59	75.41	56-88
4.75	260.5	54.05	78.63	21.37	16-36
2.36	48.65	10.09	88.72	11.28	4-19
0.3	22.32	4.63	93.35	6.65	2-10
0.075	8.23	1.71	95.06	4.94	0-8

Note:

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ಬೆಂಗಳೂರು-560 057.

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QUALITY CONTROL REPORTS FOR

BITUMINOUS CONCRETE

21/7/14.

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Job No.: CTCE/BBMP/W.No.12/KRIDL/QB(BC)/2014-15 17.07.2014

TEST REPORT ON DETERMINATION OF BITUMEN CHARACTERISTICS

CLIENT	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
AGENCY	:	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	:	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
REFERENCE	:	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
SOURCE OF LOCATION	:	Hot mix Plant, Bangalore
DATE OF TESTING	:	17.07.2014

The results of the tests conducted on the bitumen sample.

Sl. No	Description	Test Method as per IS	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ^{0}C, 1/10 mm	IS :1203 -1978 (RA-2009)	66	60 to 70
2	Softening point, ^{0}C	IS :1205 -1978 (RA-2009)	43	Min. 45
3	Ductility at 27^{0}C, cm	IS :1208 -1978 (RA-2009)	100 >	Min. 50
4	Flash Point, ^{0}C	IS :1209 -1978 (RA-2009)	296	Min. 220

Note:

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Basaveshwaranagar,
Bangalore-560079.

AE12

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BC/AIV/2014-15 17.07.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of the Work	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
Source / Location	Hot Mix Plant, Bangalore
Type of Mix	Bituminous Concrete
Date of Testing	17.07.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	378	380	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	80	81	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	298	299	
4	Aggregate Impact value = percent fines 100* (W_2/W_1) percent	21.16	21.32	21.24

Comments:

→ Maximum allowable Aggregate Impact value for Bituminous Concrete is 24%

Note:

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BC/AIV/2014-15 17.07.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of the Work	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
Source / Location	Hot Mix Plant, Bangalore
Type of Mix	Bituminous Concrete
Date of Testing	17.07.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	388	389	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	88	89	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	300	
4	Aggregate Impact value = percent fines 100* (W_2/W_1) percent	22.68	22.88	22.78

Comments:

→ Maximum allowable Aggregate Impact value for Bituminous Concrete is 24%

Note:

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BC/Shape.T/2014-15 : 18.07.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Customer	: **Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of Work	: Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	: BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
Technical Reference	: IS 2386(Part 1) 1963 (RA 2007)
Type of Mix	: Bituminous Concrete
Date of Testing	: 18.07.2014

Result : Flakiness Index = **12.32%**

Elongation Index = **13.23%**

Result : Combined Flakiness & Elongation index **25.55%**

Comments:

→ Maximum allowable Flakiness & Elongation Index for Dense Graded Bituminous Macadam is 30%

Note:

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BC/Shape.T/2014-15 : 18.07.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Customer	: **Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
Agency	: **Technical Manager,** KRIDL, Bangalore.
Name of Work	: Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	: BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
Technical Reference	: IS 2386(Part 1) 1963 (RA 2007)
Type of Mix	: Bituminous Concrete
Date of Testing	: 18.07.2014

Result : Flakiness Index = **12.32%**

Elongation Index = **13.28%**

Result : Combined Flakiness & Elongation index **25.60%**

Comments:

→ Maximum allowable Flakiness & Elongation Index for Dense Graded Bituminous Macadam is 30%

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BC/Stripping/2014-15 21.07.2014

Stripping Value of Road Aggregates (Static Immersion Test)

IS: 6241

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of the Work	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
Type of Mix	Bituminous Concrete
Date of Testing	21.07.2014

Type of binder : 60/70
Percentage of binder used : 5.00% by wt.
Total weight of aggregate : 200 g
Total weight of binder : 10.00 g
Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	3.3	3.40	96.60
2	3.4		
3	3.5		

Comments:

→ Minimum allowable Aggregate retained coating for Bituminous Concrete is 95%

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BC/Sp_Wa/2014-15 21.07.2014

Specific Gravity And Water Absorption Test

IS: 2386 Part III

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of the Work	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
Type of Mix	Bituminous Concrete
Date of Testing	21.07.2014

Sl. No.	Details	Notation	Test Number			Mean Value
			Test 1	Test 2	Test 3	
1	Weight of aggregate suspended in water with the basket	W_1 g	1995	1996	1997	
2	Weight of basket suspended in water	W_2 g	755	755	755	
3	Weight of saturated aggregate in water	$(W_1 - W_2) = W_s$ g	1239	1238	1242	
4	Weight of saturated surface dry aggregate in air	W_3 g	2022	2023	2024	
5	Weight of water equal to the volume of the aggregate	$(W_3 - W_S)$ g	783	785	782	
6	Weight of oven dried aggregate	W_4 g	2004	2005	2006	
7	Specific Gravity	$W_4/(W_3-W_S)$	2.559	2.554	2.565	2.560
8	Apparent Specific gravity	$W_4/(W_4-W_S)$	2.620	2.614	2.626	2.620
9	Water Absorption	$((W_3-W_4)*100)/W_4$	0.90%	0.90%	0.90%	0.90%

Comments:

→ Maximum allowable Aggregate Water absorption value for Bituminous Concrete is 2.0%

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JobNo: CTCE/BBMP/W.No.12/KRIDL/BC/Bitumen/2014-15 21.07.2014

BITUMEN CONTENT DETERMINATION OF BITUMINOUS CONCRETE MIX

As per IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
AGENCY	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
SAMPLE I/D	Medarahalli Main Road Ward No.12,BBMP, Bangalore.
DATE OF TESTING	21.07.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	475	472
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	25	28.00
7. Bitumen content in %	5.00	5.60
8. Average	**5.30**	

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Job No.: CTCE/BBMP/WC No.12/KRIDL/GSB-1/GR/2014-15********** Date : 04.07.2014

GRADATION FOR GSB-I (CLOSE GRADED)
IS: 2720 (Part 4)

Client : **Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of work : Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.

Reference : BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014

Date of Testing : 04.07.2014

Sample Source : GSB Mix Plant Bangalore. **Oven Dry Wt (gm) :** 25300

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specified Limits
75.0	0	0	0.00	0	100
53.0	1200	1200	4.74	95.26	80-100
26.50	6500	7700	30.43	69.57	55-90
9.50	4000	11700	46.25	53.75	35-65
4.75	3250	14950	59.09	40.91	25-55
2.36	2150	17100	67.59	32.41	20-40
0.425	4540	21640	85.53	14.47	10-25
0.075	2560	24200	95.65	4.35	3-10
PAN	1100				
Total	25300				

Civil-Tech Consultants Bangalore

Remarks: Satisfies MORTH Specifications as per Table 400-1, Grading I

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JobNo: CTCE/BBMP/W.No.12/KRIDL/BC/Bitumen/2014-15 21.07.2014

BITUMEN CONTENT AFTER GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

As Per IS 2386 and IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
AGENCY	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
SAMPLE I/D	Medarahalli Main Road Ward No.12,BBMP, Bangalore.
DATE OF TESTING	21.07.2014

GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-18 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
19	0	0	0	100	100
13.2	45.26	9.53	9.53	90.47	79-100
9.5	33.26	7.00	16.53	83.47	70-88
4.75	69.63	14.66	31.19	68.81	53-71
2.36	66.32	13.96	45.15	54.85	42-58
1.18	50.25	10.58	55.73	44.27	34-48
0.6	62.32	13.12	68.85	31.15	26-38
0.3	49.36	10.39	79.24	20.76	18-28
0.15	35.26	7.42	86.67	13.33	12-20
0.075	35.26	7.42	94.09	5.91	4-10

Sieve Size in mm	Trail 2				Specified Limits as per MORTH specification table 500-18 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
19	0	0	0	100	100
13.2	36.25	7.68	7.68	92.32	79-100
9.5	46.32	9.81	17.49	82.51	70-88
4.75	72.25	15.31	32.80	67.20	53-71
2.36	62.35	13.21	46.01	53.99	42-58
1.18	72.25	15.31	61.32	38.68	34-48
0.6	42.58	9.02	70.34	29.66	26-38
0.3	35.62	7.55	77.89	22.11	18-28
0.15	41.25	8.74	86.63	13.38	12-20
0.075	36.25	7.68	94.31	5.69	4-10

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BC/Agg/2014-15 21.07.2014

Aggregate Gradation Test

IS : 2386 Part I

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of theWork	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
Sample I / D	Hot Mix Plant, Bangalore
Type of Mix	Bituminous Concrete
Date of Testing	21.07.2014

Total Weight of Sample: **5200** gm

SIEVE SIZE, mm	Weight Retained, gm	% Retained	Cummulative % Retained	% Passing	JOBMIX Gradation as per MORTH	Remarks
19	0	0	0	100	100	Gradation satisfies Bituminous concrete Grade-II specification as per MORTH
13.2	620	11.92	11.92	88.08	79 - 100	
9.5	485	9.33	21.25	78.75	70 - 88	
4.75	630	12.12	33.37	66.63	53 - 71	
2.36	525	10.10	43.46	56.54	42 - 58	
1.18	640	12.31	55.77	44.23	34 - 48	
0.600	500	9.62	65.38	34.62	26 - 38	
0.300	550	10.58	75.96	24.04	18 - 28	
0.150	425	8.17	84.13	15.87	12 - 20	
0.075	525	10.10	94.23	5.77	4 - 10	

Total Weight of Sample: **5300** gm

SIEVE SIZE, mm	Weight Retained, gm	% Retained	Cummulative % Retained	% Passing	JOBMIX Gradation as per MORTH	Remarks
19	0	0	0	100	100	Gradation satisfies Bituminous concrete Grade-II specification as per MORTH
13.2	610	11.51	11.51	88.49	79 - 100	
9.5	480	9.06	20.57	79.43	70 - 88	
4.75	640	12.08	32.64	67.36	53 - 71	
2.36	520	9.81	42.45	57.55	42 - 58	
1.18	635	11.98	54.43	45.57	34 - 48	
0.600	680	12.83	67.26	32.74	26 - 38	
0.300	450	8.49	75.75	24.25	18 - 28	
0.150	435	8.21	83.96	16.04	12 - 20	
0.075	400	7.55	91.51	8.49	4 - 10	

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ATTERBERG LIMITS TEST FOR GSB (CLOSE GRADED)
IS : 2720 (Part - 5)

Client : **Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of work : Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.

Reference : BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014

Date of Testing : 04.07.2014

As per MORTH Table : 400-11

Sl. No.	Particulars	Test Results	Standards as per Specifications
1	Liquid Limit, %	24.00	25.0% Maximum.
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

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AE12

QUALITY CONTROL REPORTS FOR

WE MIX MACADAM(WMM)

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Job No.: CTCE/BBMP/W.No.12/KRIDL/WMM/Gradation/2014-15 10.07.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.

Reference : BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014

Date of Testing : 10.07.2014

Material : WMM

Sample Location : WMM Mix Plant Oven Dry Wt (gm): **25600**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	950	950	3.7	96.3	95-100
22.4	5250	6200	24.2	75.8	60-80
11.2	5300	11500	44.9	55.1	40-60
4.75	5000	16500	64.5	35.5	25-40
2.36	3630	20130	78.6	21.4	15-30
0.600	2300	22430	87.6	12.4	8-22
0.075	2270	24700	96.5	3.5	0-8

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ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್ ಎಂ ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು

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Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of the Work	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	10.07.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	389	390	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	89	90	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	300	
4	Aggregate Impact value = percent fines	22.88	23.08	
	100* (W_2/W_1)%			22.54

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
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Job No.: CTCE/BBMP/W.No.12/KRIDL/WMM/S-T/2014-15 10.07.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of Work	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	10.07.2014

Result : Flakiness Index = **11.99%**

Elongation Index = **13.25%**

Result : Combined Flakiness & Elongation index **25.24%**

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

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QUALITY CONTROL REPORTS FOR

BITUMINOUS MACADAM

BM :- 14/8/17

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Job No.: CTCE/BBMP/W.No.12/KRIDL/BM/Bitumen/2014-15 14.07.2014

BITUMEN CONTENT DETERMINATION OF BITUMINOUS MACADAM MIX

AS per IRC:SP:-1984

CLIENT	**Asst. Executive Engineer,** Shettyhalli Sub Division, Dasarahalli Zone, BBMP, Bangalore.
AGENCY	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements to Medarahalli Main Road balance portion, in Ward No.12, in Shettyhalli Sub Division, BBMP, Bangalore.
REFERENCE	BBMP/AEE/SSD/DZ/PR/2014-15 Dated: 30.06.2014
SAMPLE I/D	Medarahalli Main Road Ward No.12, BBMP, Bangalore.
DATE OF TESTING	14.07.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	482	482
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	18	18.00
7. Bitumen content in %	3.60	3.60
8. Average	**3.60**	

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